



U.S. DEPARTMENT OF
ENERGY

Nuclear Energy

Nuclear Fuels Storage and Transportation Planning Project (NFST) Program Status

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National Transportation Stakeholders Forum

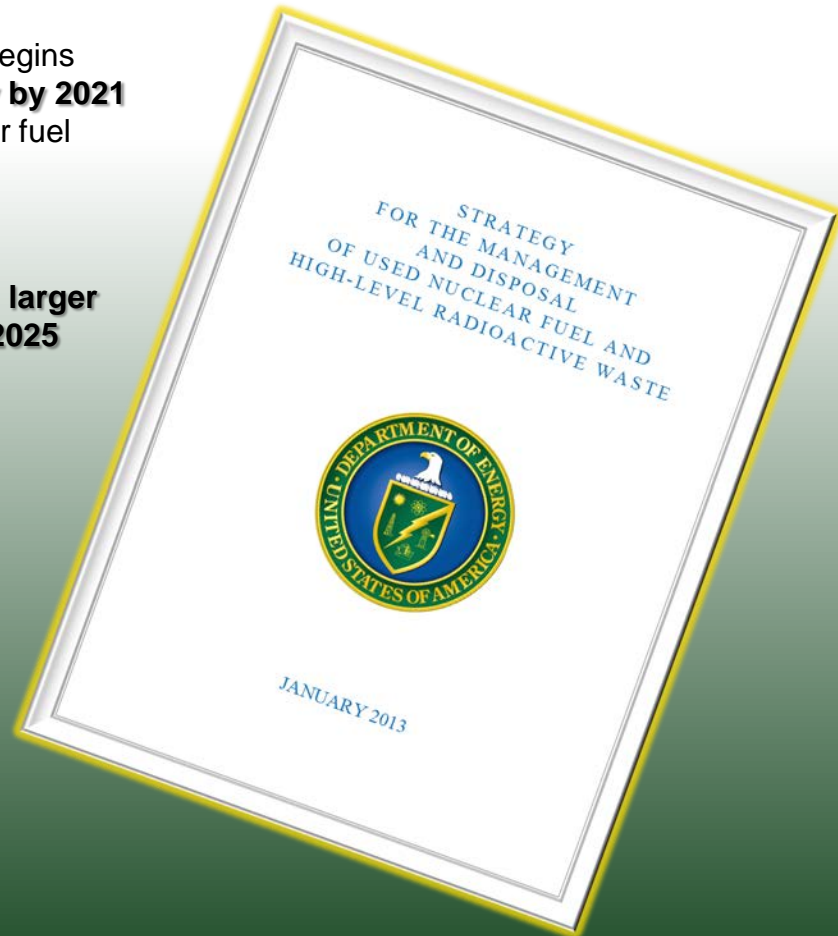
Buffalo, New York

May 2013



Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste

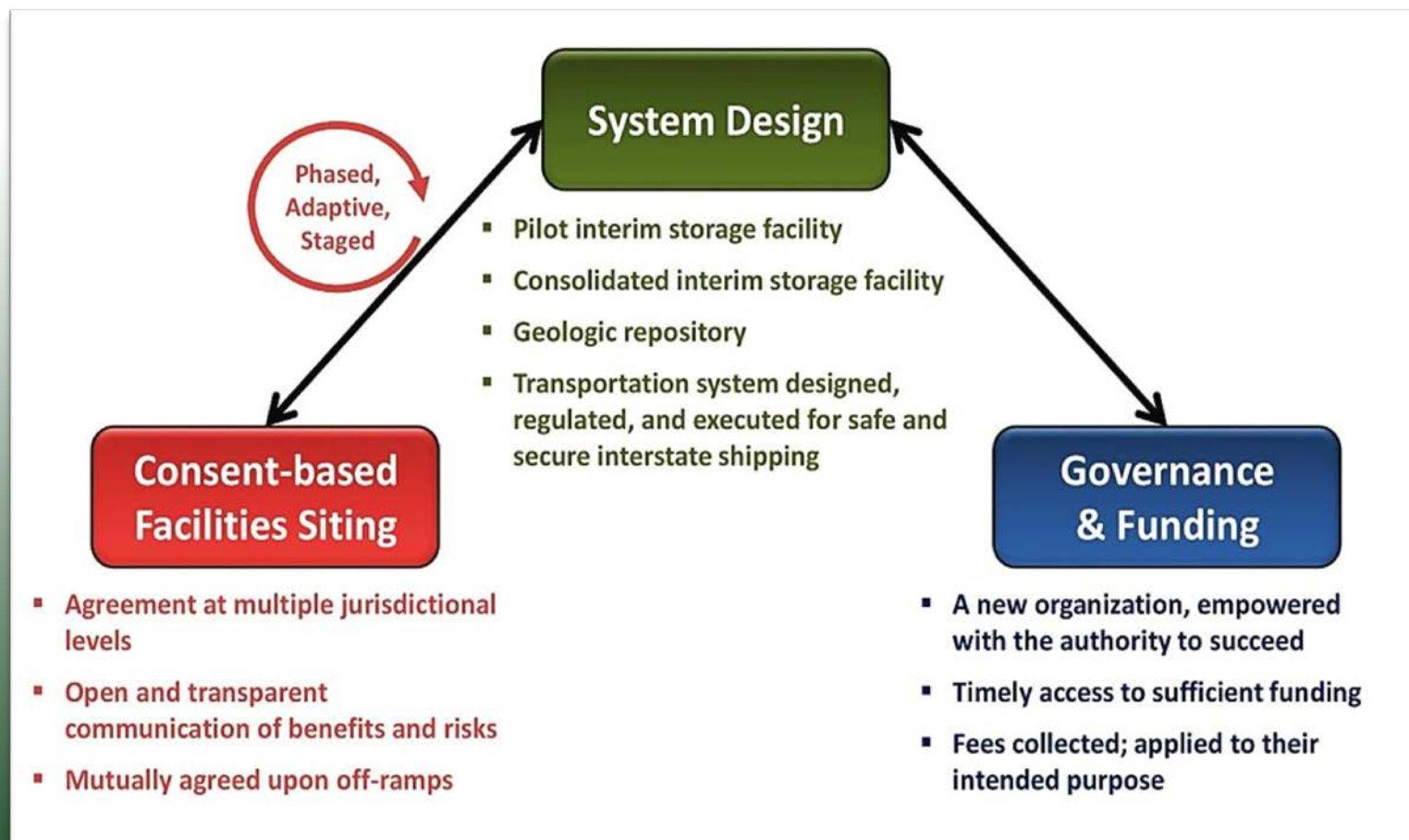
- “With the appropriate authorizations from Congress, the Administration currently plans to implement a program over the next 10 years that:
 - Sites, designs and licenses, constructs and begins operations of a **pilot interim storage facility by 2021** with an initial focus on accepting used nuclear fuel from shut-down reactor sites;
 - Advances toward the siting and licensing of a **larger interim storage facility to be available by 2025** that will have sufficient capacity to provide flexibility in the waste management system and allows for acceptance of enough used nuclear fuel to reduce expected government liabilities; and
 - Makes demonstrable progress on the siting and characterization of repository sites to facilitate the availability of a **geologic repository by 2048.**”





Key Strategy Elements for Interim Storage are Supported by NFST

NFST responsible for planning and implementation of the storage and transportation aspects of the Administration's Strategy

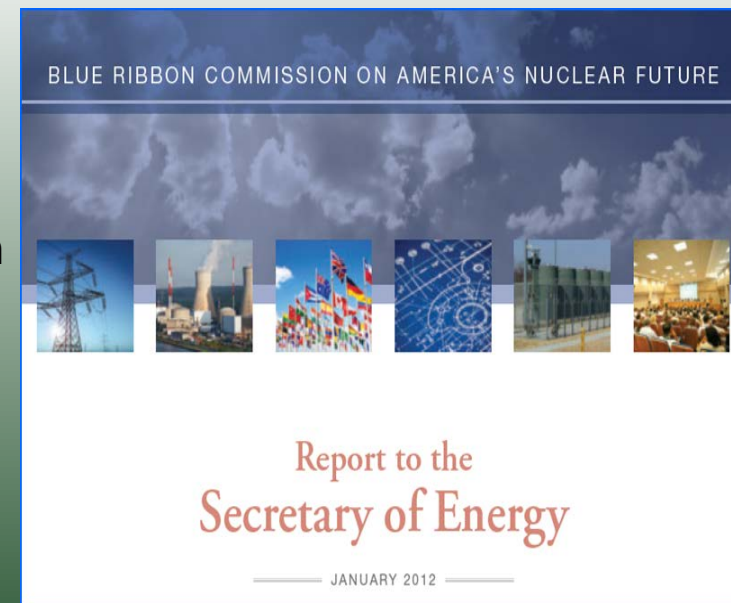




Blue Ribbon Commission Report to the Secretary of Energy

The BRC report (January, 2012) recommended “early preparation for the eventual large-scale transport of spent nuclear fuel and high-level nuclear waste to consolidated storage and disposal facilities.” The DOE’s Strategy Document (January, 2013) endorsed the BRC recommendations and identified a path forward for implementation of near-term recommendations including:

- Initiating planning for a large-scale transportation program
- Evaluating operational options for consolidated storage and furthering design of a generic consolidated storage facility
- Evaluating inventory, transportation interface and status of UNF at shutdown reactors
- Developing plans for initiating a consent-based process



Key Activities: Early Transportation Planning

Re-establish consultative and collaborative partnerships with SRGs and Tribes for the completion of specific near-term transportation planning objectives in the following areas:

BRC report: “Historically some programs have treated transportation planning as an afterthought. No successful programs have done so.”

- *Development of policies and procedures for the implementation of section 180(c) of the NWPA*
- *Development of a national transportation plan to move stranded UNF from shutdown sites to consolidated storage*
- *Examination of routing issues for initial planning purposes*

Key Activities: Early Transportation Planning – meetings and working groups

- **Meetings held with States in October 2012, and in March 2013 with States and Tribes**
- **NTSF working groups established**
 - ❑ *180c Working group - Meets bi-monthly through conference calls and webinars – has made significant progress toward resolution of issues related to policies for distribution of funding and technical assistance to States*
 - ❑ *National Transportation Plan (NTP) working group – released annotated outline of NTP – held kickoff webinar on April 24 with plans for monthly webinars through summer – is soliciting input during NTSF breakout sessions*

BRC recommendation:

“Complete development of procedures and regulations for providing technical assistance, funding, and training to local groups in preparation for movement of spent fuel”

Key Activities: Early Transportation Planning – continued

- **Technical analysis of on-site and near-site transportation infrastructure - *is underway as part of a larger feasibility study to determine how to move UNF from stranded sites to consolidated storage***
- **Evaluation of GIS-based routing decision support tools**
- ***Development of programmatic communication plan and materials for siting and transportation outreach (with involvement of the NTSF communications working group)***

NAS/BRC recommendations: “DOE should identify and make public its preferred suite of routes as soon practicable to support State, local and Tribal planning and preparedness. ”



Key Activities: Interim Storage Facility (ISF) Siting

- Developed a database of prior siting efforts
- Reviewing and evaluating lessons learned from prior domestic and international siting efforts
- Initiated efforts to develop a communications plan

BRC recommendation:

“Prepare to respond to requests for information from communities, states, or tribes that might be interested in learning more about hosting a consolidated storage facility”

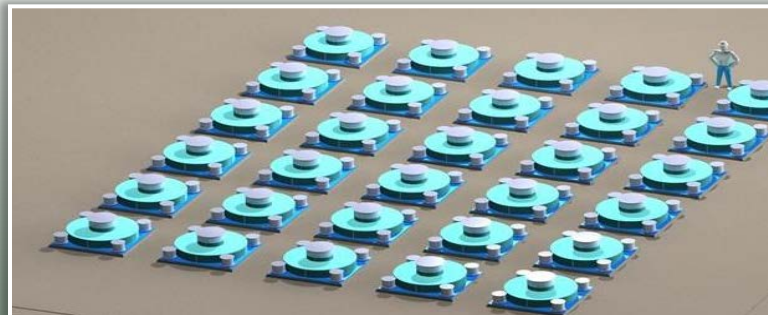




Key Activities: Storage

- Competed task on design concepts using 3 separate industry contractors
- Preparing NFST concept report based on industry concepts and system architecture studies to provide a guidance document for conceptual design and to support siting activities
- Preparing to award design contract for conceptual design alternatives for generic interim storage facility and transportation of used nuclear fuel
- Evaluating costs and impacts of opening non-disposable storage canisters

BRC recommendation:
“Perform systems analyses and design studies needed to develop a conceptual design for a spent fuel storage facility”



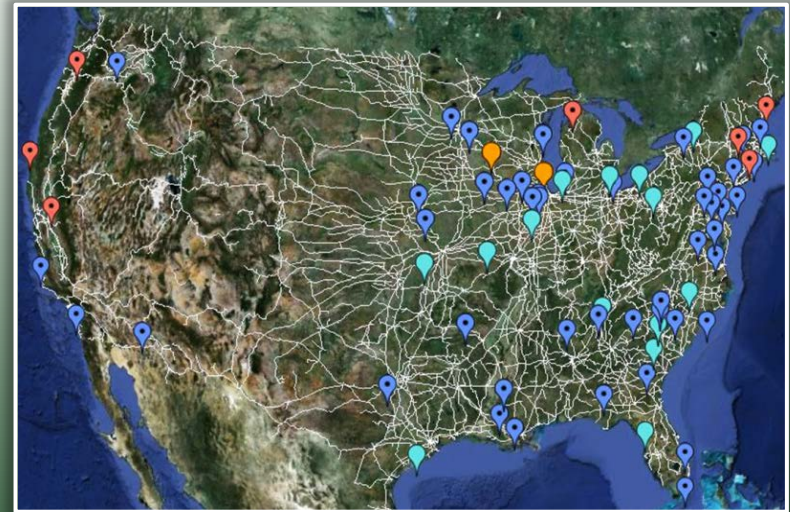
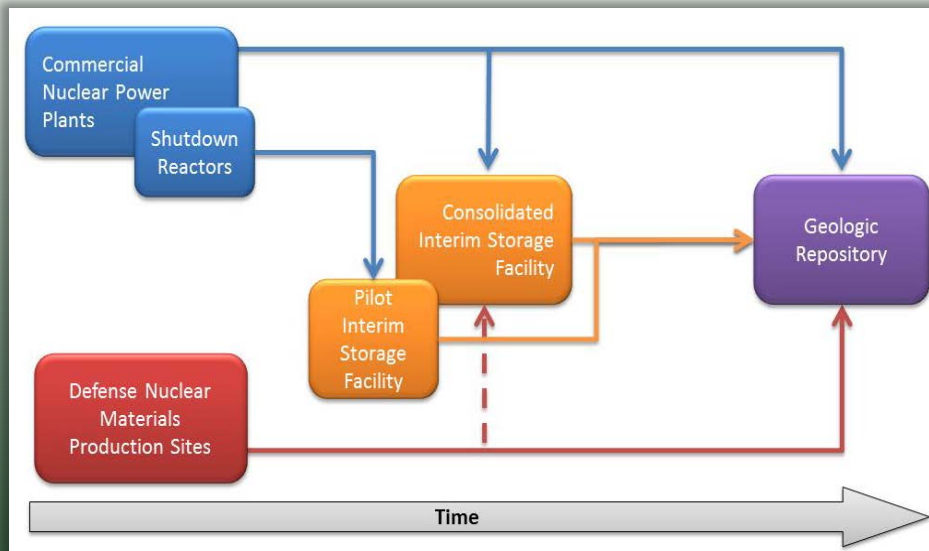


Key Activities: Systems Analysis

- Performed systems analysis of alternative approaches for accepting and moving fuel; continuing activity
- Developing methodologies, approaches, and tools to analyze the overall interface between at-reactor, consolidated storage, and ultimate disposition
- Evaluating select UNF disposition scenarios

BRC recommendation:

“Develop systems analyses to provide quantitative estimates of the system benefits of utility actions”



Map of operational and shut-down reactor sites



Discussion Draft, Nuclear Waste Administration Act of 2013

- Released on April 25, 2013 by Senators Alexander, Feinstein, Wyden and Murkowski
- Senators are seeking comment by May 24, 2013, from stakeholders on the proposed language and a series of specific questions they have posed
- Draft legislative language and associated materials are available at <http://www.energy.senate.gov/public/index.cfm/nuclear-waste-bill-feedback>
- Provisions of the measure would:
 - Establish a new Nuclear Waste Administration and provide for oversight
 - Provide for a consent-based process for siting storage and disposal facilities
 - Modify “linkages” between storage facilities and a repository
 - Allow more flexible use of funding and technical assistance for states and tribes to prepare for shipments
 - Change access to fees collected from waste generators



- **This is a new program, with a new approach and focus**
- **We are committed to drawing from successful past campaigns**
- **We are working diligently to do preparatory work until such time as Congress enacts new legislation—which will be required to fully implement a new strategy**
- **We are committed to working with you as partners to build a transportation system that is collaborative, that will function safely and securely, and will ultimately merit public confidence**